

KAVERIN A. A.

KULAGIN, S.G.; KOVBASYUK, I.D.; DAGAYEV, M.M.; ROZENBLYUM, N.D.; YEGORCHENKO, I.F. (Irkutsk); KAVERIN, A.A. (Irkutsk); KONSTANTINOVA, T.G. (Irkutsk); KUKLINA, V.A. (Irkutsk); KUKLIN, G.V. (Irkutsk); SAZONOVA, Z.G., (Irkutsk); CHERNYKH, L.I. (Irkutsk); CHERNYKH, N.S. (Irkutsk); DEMIDOBICH, Ye.G.; BRONSHTEIN, V.A.; YAKHONTOVA, N.S. (Leningrad); PEROVA, N.B.; DOKUCHAYEVA, O.D.; KATASEV, L.A.; KLYAKOTKO, M.A.; PARENAGO, P.P.; SHCHERBINA-SAMOYLOVA, I.S.; MASEVICH, A.G.; RYABOV, Yu.A.; SHCHEGLOV, V.P.; PEREL', Yu.G.; MARTYNOV, D.Ya.; FEDYNSKIY, V.V.; VORONTSOV-VEL'YAMINOV, B.A.; ZIGEL', F.Yu.; BAKULIN, P.I., otv.red.; RAKHLIN, I.Ye., red.; AKHLAMOV, S.N., tekhn.red.

[Astronomical calendar] Astronomicheskii kalendar'. [A yearbook; variable section for 1959] Ezhegodnik. Peremennaya chast', 1959. Red.kollektiva P.I. Bakulin i dr. Moskva, Gos.isd-vo fiziko-matem.lit-ry, 1958. 370 p. (Vsesoiuznoe astronome-geodezicheskoe obshchestvo, no.62) (MIRA 12:2)

1. Gosudarstvennoye astronome-geodezicheskoye obshchestvo (for Kulagin Kovbasyuk, Demidovich). 2. Moskovskoye otdeleniye Vsesoyuznogo astronome-geodezicheskogo obshchestva (for Dagayev, Rozenblyum, Bronshten, Perova).

(Astronomy--Yearbooks)

KAVERIN, AA

DAGAYEV, M.M.; ZIGEL', F.Yu., kand. ped. nauk; LARIONOV, A.F.; PORTSEVSKIY, K.A.; SHISHAKOV, V.A., kand. ped. nauk; BRONSHTEN, V.A.; red.; KAVERIN, A.A. (Irkntsk); TSIRUL'NITSKIY, N.P., tekhn. red.

[1958 astronomical calendar for schools] Shkol'nyi astronomicheski kalendar' na 1958 god. Moskva, Gos. uchebno-pedagog. izd-vo M-va prosv. RSFSR. No.8. 1958. 120 p. (MIRA 11:7)

1. Starshiy prepodavatel' Moskovskogo gorodskogo pedagogicheskogo instituta imeni V.P. Potemkina (for Dagayev). 2. Lektor Moskovskogo planétariya (for Larionov, Portsevskiy).

(Astronomy--Yearbooks)

SOV/35-59-8-6195

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1959,
Nr 8, p 15

AUTHORS: Kaverin, A.A., Chernykh, N.S.

TITLE: The Observation of the Occultation of Venus by the Moon on
July 14, 1958

PERIODICAL: Astron. tsirkulyar, 1958, July 3, Nr 193, p 33

ABSTRACT: The moments of four contacts of the occultation of Venus by the
Moon are given, obtained at the Irkutsk Municipal Astronomical
Observatory.

Card 1/1

SOV/35-59-9-7256

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1959, Nr 9, p 62 (USSR)

AUTHORS: Kaverin, A.A., Chernykh, N.S., Yegorchenko, I.F.

TITLE: Observation of the Total Lunar Eclipse on November 7, 1957, in Irkutsk

PERIODICAL: Astron. tsirkulyar, 1958, July 3, Nr 193, pp 34 - 35

ABSTRACT: The observations were carried out in good weather. The brightness of the eclipse according to Danjon's scale was estimated to be of the 4 degree. The moments of the 4 contacts are given, as well as those of the covering and uncovering of the lunar craters. The observations of the integrated brightness of the Moon were carried out with the aid of a visual photometer. During the eclipse the brightness changed from $-11^m.8$ to $-4^m.3$.

G.A.M.

Card 1/1

SOV/35-59-8-6161

Translation from: Referativnyy zhurnal, Astronomiya i Geodeziya, 1959,
Nr 8, p 11

AUTHOR: Kaverin, A.A.

TITLE: The Occultation of Regulus by Venus on July 7, 1959

PERIODICAL: Astron. tsirkulyar, 1958, October 16, Nr 196, p 17

ABSTRACT: On July 7, 1959 there will be an occultation of Regulus by
Venus. The geocentric moments of the beginning and end of
this phenomenon are as follows:

$$\begin{array}{ll} T_b = 12^h 24^m 54^s .69 & P_b = 85^{\circ} 44' \\ T_e = 14^h 36^m 55^s .05 & P_e = 330^{\circ} 12' \end{array}$$

The shortest distance between the center of Venus and Regulus
is $d = 6''.93$.

N.P.K.

Card 1/1

KAVERIN, A.A.; CHERNYKH, N.S.

Occultation of Regulus by Venus on July 7, 1959. Astron. tsir.
no.197:17-18 N '58. (MIRA 12:7)

1. Irkutskaya gorodskaya astronomicheskaya observatoriya.
(Occultations)

KULAGIN, S.G.; KOVBASYUK, L.D.; DAGAYEV, M.M.; LAZAREVSKIY, V.S.; KAVERIN, A.A.; KUKLIN, G.V.; CHERNYKH, N.S.; DEMIDOVICH, Ye.G.; BRONSHTEIN, V.A.; YAKHONTOVA, N.S. (Leningrad); PEROVA, N.B.; DOKUCHAYEVA, O.D.; KATASEV, L.A.; MASEVICH, A.G.; SHCHERBINA-SAMOYLOVA, I.S.; ARSENT'YEV, V.V.; FRANK-KAMENETSKIY, D.A.; LEYKIN, G.A.; SHCHEGLOV, P.V.; PEREL', Yu.G.; BAKULIN, P.I., *otv.red.*; MASEVICH, A.G., *red.*; PARENAGO, P.P., *red.*; RAKHLIN, I.Ye., *red.*; AKHLAMOV, S.N., *tekhn.red.*

[Astronomical calendar. A yearbook; variable section for 1959]
Astronomicheskii kalendar'. Ezhegodnik. Peremennaya chast',
1960. Red.kollegia P.I.Bakulin i dr. Moskva, Gos.izd-vo fiziko-
matem.lit-ry, 1959. 351 p. (Vsesoyuznoe astronomo-geodezicheskoe
obshchestvo, no.63) (MIRA 13:1)

1. Gosudarstvennoye astronomo-geodezicheskoye obshchestvo (GAGO)
(for Kulagin, Kovbasyuk, Lazarevskiy, Demidovich). 2. Moskovskoye
otdeleniye Vsesoyuznogo astronomo-geodezicheskogo obshchestva
(MOVAGO) (for Dagayev, Bronshten, Perova).
(Astronomy--Yearbooks)

KAVERIN, A.A.

Classification of lunar eclipses. Biul.VAGO no.27:27-31 '60.
(MIRA 13:6)

1. Irkutskaya gorodskaya astronomicheskaya observatoriya
Gosudarstvennogo universiteta im. A.A.Zhdanova.
(Eclipses, Lunar--Classification)

KAVERIN, A. A. (Irkutsk)

Terminology of lunar eclipses. Astron. tsir. no. 209:42-43 Mr '60.
(MIRA 13:9)

(Eclipses, Lunar)

ZAPOROZHITSEVA, S.V.; SOLOV'YEV, V.Ye.; KAVERIN, A.A.

Observation of the fourth contact of the total solar eclipse of
February 15, 1961. Astron.tsir. no.219:16-17 Mr '61.
(MIRA 14:10)

(Eclipses, Solar--1961)

KAVERIN, A.A.; SOLOV'YEV, V.Ye.

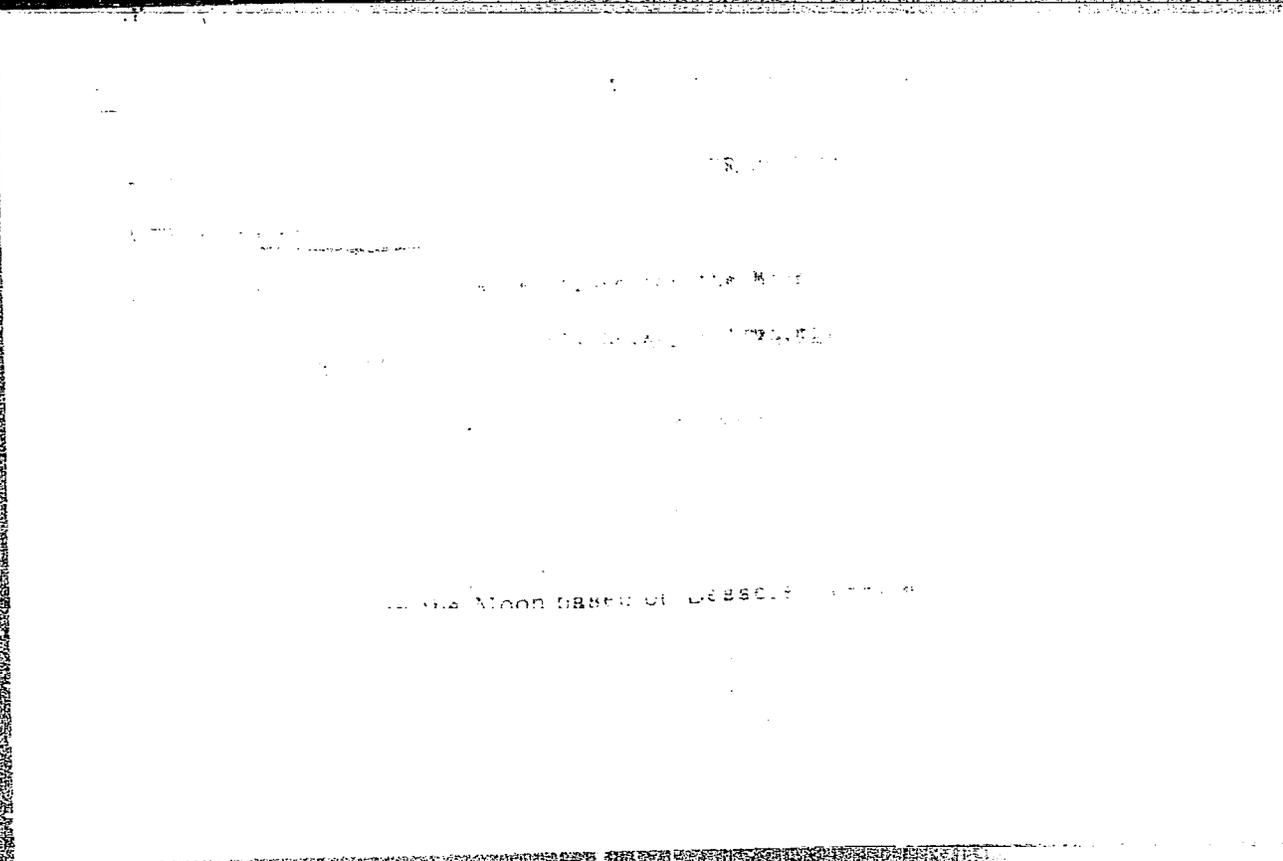
Observation of the total solar eclipse of February 15, 1961, in
the western Crimea. Biul.VAGO no.32:44 '62. (MIRA 15:11)

1. Irkutskoye otdeleniye Vsesoyuznogo astronomo-geodezicheskogo
obshchestva i Khar'kovskoye otdeleniye Vsesoyuznogo astronomo-
geodezicheskogo obshchestva. (Eclipses, Solar--1961)

KAVERIN, A.A.

Conjunction of Venus and Spica on August 31, 1962. Astron.
tsir. no.228:34-35 Ap '62. (MIRA 16:6)

1. Irkutskiy gosudarstvennyy pedagogicheskiy institut.
(Venus(Planet))



using formulas like those for solar eclipses on the LBRIN.

SECRET

ACCESSION NR: A75000031

L 52346-65

same as that of the dark shadow which is mixed at the top.

KAVERIN, A. I.

AID P - 826

Subject : USSR/Mining
Card 1/1 Pub. 78 - 11/26
Author : Kaverin, A.
Title : ~~USSR/Mining~~
The effectiveness of gas-protective casings of the submerged type
Periodical : Neft. khoz., v. 32, #9, 43-44, S 1954
Abstract : Description of construction and operation of gas-protective casings for deep well pumps. Daily oil well output is appreciably increased by this arrangement.
Institution: None
Submitted : No date

AID P - 3633

Subject : USSR/Mining
Card 1/1 Pub. 78 - 17/20
Authors : Azhnov, V. G. and A. I. Kaverin
Title : ~~USSR/Mining~~
Some results of the formation hydraulic breakthrough in Krasnodar oil fields
Periodical : Neft. khoz., v. 33, #10, 89-90, O 1955
Abstract : The method of hydraulic breakthrough has been applied for secondary recovery of oil in some depleted wells located in the Krasnodar oil fields. The fluids used in those flooding operations were: heavy viscous oil, 10% hydrochloric acid solution, light oil and underground reservoir water. The results have not been satisfactory in all cases and therefore only wells where reservoir pressure and oil saturation remain adequate are considered for further recovery.
Institution : None
Submitted : No date

Subject : USSR/Engineering

AID P - 3832

Card 1/1 Pub. 78 - 20/25

Author : Kaverin, A. I.

Title : ~~XXXXXXXXXXXXXXXXXXXX~~
Experience in combatting paraffin deposition in pump tubing

Periodical : Neft. khoz., v. 33, #11, 88-90, N 1955

Abstract : The article describes mechanical rotary reaming bars designed to scrape off the paraffin deposits in oil well tubing. Diagrams.

Institution : None

Submitted : No date

~~KAVERIN, Aleksay Ivanovich; LOTYSHEV, I.P., redaktor; KOVANOV, P.F.,
tekhnicheskiy redaktor~~

[New equipment and automatic control in the Kuban petroleum
industry] Novaya tekhnika i avtomatika na neftepromyslakh
Kubani. Krasnodar, Krasnodarskoe kn-vo, 1956. 35 p. (MLRA 10:4)
(Kuban--Petroleum industry) (Automatic control)

~~BASOV-GRINEV, S.A.; KAVERIN, A.I.~~

Automatic control of oil pumping in oilfields. Neft.khoz. 34
no.2:63-65 F '56. (MLRA 9:5)
(Automatic control) (Oil well pumps)

KAVERIN, A.I.

Work results of foreman V.A. Taldai's oil production crew.

Neft.khoz. 35 no.1:63-65 Ja '57.

(MLRA 10:2)

(Oil wells)

KAVERIN, B. P.

Automobile materials; rubber, wood, varnishes, and paints. A textbook. Moskva, Gos. nauch.-tekhn. izd-vo mashinostroit. lit-ry, 1949. 125 p. (52-15013)

Tli54.K3

KAVERIN, B.P.

POGUMIRSKIY, A.I., kandidat tekhnicheskikh nauk; KAVERIN, B.P., kandidat tekhnicheskikh nauk; SLOBODSKOY, B.I., redaktor; AKHLANOV, S.F., tekhnicheskiiy redaktor.

[Industrial drawing] Proizvodstvennyi chertezh. Izd. 2-o. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1953. 70 p. (Nauchno-populiarnaya biblioteka, no.26) (MLBA 7:12)
(Design, Industrial) (Mechanical drawing)

POGUMIRSKIY, Aleksandr Ignat'yevich; kand.tekhn.nauk; ~~KAVRIN, Pavel~~
~~Favlovich, kand.tekhn.nauk; MEZHENTSEV, V.A., red.; GAVRILOV,~~
S.S., tekhn.red.

[Industrial drawing] Proisvodstvennyi chertesh. Izd.3.
Moskva, Gos.izd-vo tekhniko-teoret.lit. 1956. 70 p.(Nauchno-
populiarnaya biblioteka, no.26) (MIRA 12:9)
(Mechanical drawing)

BUKHMANN, A.I.; KAVERIN, G.L.

Problem of bezoars of the stomach. Khirurgia 36 no.4:100-103
Ap '60. (MIRA 13:12)

(BEZOARS)

~~KAVERIN, I.A.~~

Achievements of Leningrad efficiency promoters. Izobr. v SSSR 2 no.6:
19-20 Je '57. (MLRA 10:8)

(Machine-shop practice)

KAVERIN, K., inzh.; DIBNER, Ye., inzh.

Planning and building central establishments for machine-tractor
stations. Sil'.bud. 8 no.2:18-20 F '58. (MIRA 13:7)
(Machine-tractor stations)

ZAYTSEV, I.L.; BARANENKOV, G.S., redaktor; ~~KAYERIN, V.A.~~, redaktor;
GORIYACHAYA, M.M., redaktor; TOMARKINA, N.A., tekhnicheskiy
redaktor

[Course in higher mathematics for technical schools] Kurs vysshei
matematiki dlia tekhnikumov. Pod red. G.S.Baranenkova. Moskva, Gos.
isd-vo tekhniko-teoret. lit-ry, 1954. 356 p. [Microfilm] (NIRA 8:3)
(Geometry, Analytic) (Calculus, Differential)
(Calculus, Integral)

ZAYTSEV, Ivan Lazarevich; BARANENKOV, G.S., redaktor; ~~KAYKRIN, N.A.~~,
redaktor; GORYACHAYA, M.M., redaktor; TUMARKINA, N.A., tekhnicheskii
redaktor

[A course in higher mathematics for technical schools] Kurs vysshei
matematiki dlia tekhnikumov. Pod red. G.S.Baranenkova. Izd. 2-oe,
ispr. Moskva, Gos. izd-vo tekhniko-teoret. lit-ry, 1956. 340 p.
(Mathematics) (MLRA 9:8)

KAVERIN, N.M.; KANFISHIN, A.A.

Organization of traumatological service in Noril'sk.
Ortop., travm. i protez. 25 no.12:60 D '64.

(MIRA 19:1)

1. Iz Noril'skoy gorodskoy bol'nitsy (glavnyy vrach - N.M. Kaverin). Adres avtorov: Noril'sk, Krasnoyarskogo kraya, Gorodskaya bol'nitsa. Submitted January 13, 1964.

KAVERIN, N.M.

Medical attendance for the population in the area of Noril'sk beyond the Arctic Circle. Zdrav. Ros. Feder. 5 no.12:6-8 D '61.

(MIRA 15:1)

1. Glavnyy vrach Noril'skogo bol'nichno-poliklinicheskogo ob'yedineniya.

(NORIL'SK REGION...PUBLIC HEALTH)

KAVERIN, N.M.

Our experience in training personnel under the conditions in a
municipal hospital. Zdrav.Ros.Feder. 6 no.11:22-24 N '62.

(MIRA 15:12)

1. Glavnyy vrach Noril'skogo gorodskogo bol'nichno-polikliniche-
skogo ob'yedineniya.

(HOSPITALS--PERSONNEL MANAGEMENT)

KAVERIN, N.V.

Metody reshenia arifmeticheskikh zadach v srednei shkole [Methods of solving arithmetic problems in the secondary school]. Moskva, Uchpedgiz, 1952. 62 p.

SO: Monthly List of Russian Accessions, Vol. 6, No. 2, May 1953.

1. KAVERIN, N. V.
2. USSR (600)
4. Arithmetic - Study and Teaching
7. Analysis and synthesis and their place in the process of solving arithmetic problems.
Mat. v shkole. No. 5. 1952.

9. Monthly List of Russian Accessions, Library of Congress, January 1953. Unclassified.

KAVERIN, N.V.

A study of western American equine encephalomyelitis virus. Report
No.1: Comparative study of titration and neutralization of the virus
in tissue culture and in animals. Vop.virus. 4 no.4:416-420 J1-AE
'59. (MIRA 12:12)

1. Laboratoriya polisezonnnykh neyroinfektsiy Instituta virusologii
imeni D.I. Ivanovskogo, Moskva.
(ENCEPHALOMYELITIS, EQUINE, virology)

KAVERIN, N. V., Cand Med Sci -- "Study of ~~the~~ ^{herald} viruses of American ~~equine~~
encephalomyelitis." Mos, 1960 (Acad Med Sci). (KL, 1-61, 207)

-387-

KAVERIN, N.V.

Study of the viruses of equine encephalomyelitis. Report No. 2:
Quantitative study of the cross reaction of neutralization. Vop.
virus. 5 no. 6:653-657 N-D '60. (MIRA 14:4)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.
(ENCEPHALOMYELITIS)

KAVERIN; N.V.

Use of tissue cultures for the preparation of vaccines against
Venezuelan and North American equine encephalomyelitis. Vop.virus.
6 no.2:156-160 Mr-Apr '61. (MIRA 14:6)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva.
(ENCEPHALITIS)

KAVERIN, N.V.

Titration of herpes virus by the method of counting negative colonies
without the use of agar. Vop. virus. 6 no.6:740-742 N-D '61.
(MIRA 15:2)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.
(HERPES)

KAVERIN, N.V.

Study of the viruses of American equine encephalomyelitis. Report No. 3: Quantitative study of direct and cross neutralization reactions. Vop. virus. 7 no. 1:24-29 Ja-F '61. (MIRA 14:4)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.
(ENCEPHALOMYELITIS)

ANANIEV, V.A.; SUBLADZE, A.K.; NARSKI, S.V.; BARINSKI, I.F.;
KAVERIN, N.V.; EVSTIGNEEVA, N.A.

Study of the etiology of Botkin's epidemic hepatitis. Stud.
cercet. inframicrobil. 14 no. 3 '63.
(HEPATITIS, INFECTIOUS) (HEPATITIS VIRUSES)

KAVERIN, N.V.

Study of the first stages of the interaction of viruses with susceptible cells. Report no.1: Role of lipoproteins in the adsorption of the virus on the cell. Vop. virus. 8 no.1: 36-40 Ja-F'63. (MIRA 16:6)

1. Institut virusologii imeni D.I. Ivanovskogo AMN SSSR, Moskva.

(VIRUS RESEARCH) (LIPOPROTEINS)

ANAN'YEV, V.A.; KAVERIN, N.V.; NARSKIY, S.V.; BARINSKIY, I.F.

Characteristics of the virus isolated from feces of a patient
with epidemic hepatitis (strain K3). Vop. virus 8 no.2:217-221
Mr-Ap'63 (MIRA 16:12)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR, Moskva

KAVERIN, N.V.

Study of the initial stages of the interaction of virus and sensitive cells. Report No.2: Role of amino groups in virus adsorption by the cell. Vop. virus 8 no.5:613-616 S-0'63
(MIRA 17:1)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR,
Moskva.

SHUBLADZE, A.K.; ANAN'YEV, V.A.; NARSKIY, S.V.; BARINSKIY, N.F.;
KAVERIN, N.V.; YEVSTIGNEYEVA, N.A.

Some results of studying virus strains isolated from epi-
demic hepatitis patients. Vest. AMN SSSR 18 no.6:49-55 '63.
(MIRA 17:1)

KAVERIN, N. V.

"The development of the photosensitivity of viruses belonging to different groups in cases of culture in the presence of vital dyes."

Inst Virology im D. I. Ivanovskiy, AMS USSR, Moscow.

report presented at 4th Intl Cong, Hungarian Soc of Microbiologists, Budapest,
30 Sep-3 Oct 64.

ANAN'YEV, V.A.; SHUBLADZE, A.K.; NARSKIY, S.V.; BARINSKIY I.F.; ~~KAVERIN, N.V.;~~
YEVSTIGNEYEVA, N.A.

Study of the etiology of Botkin's epidemic hepatitis. Vop.med.
virus. no.9:3-8 '64. (MIRA 18:4)

BARINSKIY, I.F.; KAVERIN, N.V.

Study of the nature of a factor responsible for the sensitivity of cells
to a virus isolated from hepatitis patients. Vop. virus. 9 no.2:219-222
Mr-Ap '64. (MIRA 17:12)

1. Institut virusologii imeni Ivanovskogo AMN SSSR, Moskva.

KAVERIN, N.V.

A non-protein-synthesis-dependent stage of latent period and time of photosensitivity loss of virus in its interaction with the cell. Acta virol. (Praha) [Eng] 9 no.3:193-199 My'65.

1. The Ivanovsky Institute of Virology, U.S.S.R. Academy of Medical Sciences, Moscow.

KAVERIN, N.V.

Study of the early stages of the interaction of viruses with sensitive cells. Report No.3: Significance of the phosphate groups of the cell membrane for firm attachment of the virus to the cellular surface. Vop. virus. 10 no.1:14-17 Ja-F '65. (MIRA 18:5)

1. Institut virusologii imeni Ivanovskogo AMN SSSR, Moskva.

KAVERIN, N.V.

Sensitivity of viruses to visible light in their cultivation
in the presence of vital dyes. Vop. virus. 10 no.5:573-576
S-0 '65. (MIRA 18:11)

1. Institut virusologii imeni D.I.Ivanovskogo AMN SSSR,
Moskva.

I:10550-66 EWT(1)/EWA(1)/EWT(m)/EWA(b)-2 JK/RM

ACC NR: AP5027236

SOURCE CODE: UR/0020/65/164/006/1417/1420/

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33
B

AUTHOR: Kukhanova, M. K.; Kaverin, N. V.

ORG: Institut of Molecular Biology, Academy of Sciences, SSSR (Institut molekulyarnoy biologii Akademii nauk SSSR); Institute of Virobiology Im. D. I. Ivanovskiy, Academy of Medical Sciences, SSSR (Institut virusologii Akademii meditsinskikh nauk SSSR)

TITLE: Mechanism of depression of protein synthesis in cells infected with the virus of Newcastle disease

SOURCE: AN SSSR. Doklady, v. 164, no. 6, 1965, 1417-1420

TOPIC TAGS: cell physiology, protein, virus disease, organic synthesis process, RNA, cytology, enzyme, biosynthesis

ABSTRACT: Earlier authors have suggested a breakdown of cellular poly ribosomes as the reason for depressed protein synthesis under these conditions. In the search for additional reasons the authors used chicker embryo cells infected with RNA containing Newcastle disease virus, determined hemagglutinin in the cell cultures at various period after infection, used C¹⁴ to label the aminoacids in the cell protein, and isolated the ribosome fractions for study. It was found that e

Card 1/1

008

KAVERIN, P. F.

INGICHER, Yu. M., Engr. & HAVELIN, P. F., Engr.

"A New Method of Utilizing Photocells in Automatic and Telemechanics,"

Avtomatika i Telemekhanika, vol. 6, No. 4-5, 1941.

KAVERIN, P. I.

KAVERIN, P. I. --"Intraorganic Vascularization of the Stomach of Horses and Dogs." (Dissertations For Degrees In Science and Engineering Defended at USSR Higher Educational Institutions) (29)
Min Higher Education USSR, Alma-Ata Zooveterinary Inst,
Alma-Ata, 1955

SO: Knizhnaya Letopis' No 29, 16 July 1955

* For the Degree of Candidate in Biological Sciences

KAVERIN, P.I.

Gastric arteries in man and some animals. Dop. AN URSR no.6:793-
797 '65. (MIRA 18:7)

1. Donetskly meditsinskiy Institut.

KAVERIN, R.G.; STRAVINSKAYA, G.A., inzh.-ekonomist

Prospects for the development of a network of cultural institutions.
Gor.khoz.Mosk. 37 no.10:16-17 0 '63. (MIRA 17:2)

1. Rukovoditel' masterskoy No.2 Instituta general'nogo plana Moskvyy
(for Kaverin).

KAVERIN, S.N.

Erection of a series of installations from precast reinforced concrete
in the Shkapovo oil field. Stroi. truboprov. 10 no.9:16-17 S '65.
(MIRA 18:9)

1. SU-3 tresta Shkapovneftestroy, poselok Priyutovo.

L 45901-66 EWT(d)/EWP(e)/EWT(m)/EWP(v)/T/EWP(t)/ETI/EWP(L)/EWP(h)/EWP(l)

ACC NR: AR6016754

SOURCE CODE: UR/0277/66/000/001/0023/0023

IJP(c) JD/WJ/DJ/WH
AUTHOR: Kaverin, S. G.

TITLE: Investigation of the antifriction properties of porous ferrographite with nonmetallic inclusions

SOURCE: Ref. zh. Mashinostroitel'nyye materialy, konstruksii i raschet detaley mashin. Gidroprivod, Abs. 1.48.144

REF SOURCE: Sb. Vopr. mekhaniki. Vyp. 2. Tashkent, Nauka, 1965, 16-24

TOPIC TAGS: ferroalloy, nonmetallic inclusion, glass, porous metal, antifriction metal

ABSTRACT: Basic considerations are given on the feasibility of adding glass to porous ferrographite as nonmetallic inclusions, and a diagram of the technological process for producing this antifriction material is presented. The antifriction properties were determined (running-in characteristics, load capacity, durability, coefficient of friction, working temperatures and service life under various loads at sliding rates of 0.3, 0.7 and 1.2 m/sec). The tests were done by the roller-axle method on the MI-17 laboratory friction machine. The roller was made from 40Kh steel and axles with two compositions were used: porous ferrographite without glass and with 6% glass. The new material showed 1.5-2 times greater load capacity, durability and service life. The coefficient of friction and working temperatures of ferrographite with glass are lower than those of ferrographite without glass by a factor of 1.5-2. Bibliography of 12 titles. [Translation of abstract]

SUB CODE: 11

Card 1/2 MT

UDC: 669.1+546.26-162

KAVERIN, S. V.

Dissertation: "Electronographic Investigation of Nitrides and Certain Iron Carbides of Iron." Cand Phys Math Sci, Inst of Crystallography, Acad Sci USSR, Moscow, Gorkiy State U, Gorkiy 1953.

W-30928

SO: Referativnyy Zhurnal, No. 5, Dec 1953, Moscow, AN USSR (~~XXXXXXXX~~)

155 V. L. ...

... in the NaCl ... Lines in the ...

... generally it was 3.61 to 3.64, ranging up to 3.07. Satin by N was the cause. Intensity measurements made on a specimen with $a = 3.70 \text{ \AA}$ agreed with a model in which the N atoms were in octahedral holes.

A. C. Guy

USSR .

Electron diffraction study of the structure of hexagonal iron nitrides. Z. G. Pevsner and S. V. Kasimov. State Univ. (Moscow). Doklady Akad. Nauk S.S.S.R. 231: 105-107, 1976. Studies were prepared by the method of electron diffraction. The structures of Fe₂N and Fe₃N were determined. The structures of Fe₂N and Fe₃N were determined by the method of electron diffraction.

same values of lattice parameter as Fe₂N but it differs in having reflections of the types 000l and sometimes hkl with $h + k = 3n$ for $l \neq 2n$. In a no. of cases both Fe₂N and Fe₃N with the large unit cell were observed together. After nitriding for longer times, about 1 hr, at 300° or somewhat higher, Fe₂N with the small unit cell was obtained. The lattice parameters were $a = 2.765$ $c = 4.51$ Å. The N atoms occupied the octahedral space in the lattice in one layer. A similar Fe₂N structure but with the N atoms randomly distributed among the octahedra was obtained after prolonged nitriding at 250° or lower. The ϵ phase with a rhombohedral structure was not observed after prolonged nitriding.

Translation B-82533, 2 Feb 57

Kaverin, S.V.

Category : USSR/Solid State Physics - Structural Crystallography

E-3

Abs Jour : Ref Zhur - Fizika, No 2, 1957 No 3718

Author : Pinsker, Z.G., Kaverin, S.V.

Title : Electron Diffraction Determination of the Structure of Iron Carbide

Orig Pub : ^{F₄C} Kristallografiya, 1956, ^{v.1} No 1, 66-72

Abstract : Electron diffraction investigations were made of films of α -iron, obtained by sublimation in vacuum on the face of NaCl crystals and are treated in streams of CO, CO + H₂, and acetylene. Films treated in a stream of CO at 400 and 480° and in a stream of acetylene at 700° (15 minutes) displayed a carbide with a cubic cell a 3.878 ± 0.002 A, to which a composition Fe₃C is ascribed by virtue of geometrical analysis and by consideration of the intensities. A structural investigation, performed with use of the $\overline{0}2$ and $\overline{0}$ series, have established the following structure for the carbide Fe₃C: Fedorov group T_d, Z = 1; coordinates of atoms: Cb (a), 4Fe in (e) at x = 0.265. C is located in the tetrahedral vacancies of the slightly distorted lattice of the α iron with a Fe-C distance of 1.78 A. The reliability factor is R = 0.28.

Card : 1/1

Kaverin, S.V.

E-6

USSR/Phase Transformation in Solid Bodies.

APPROVED FOR RELEASE: 06/13/2000 1957 11730

CIA-RDP86-00513R000721210016-1"

Abs Jour : Referat Zhur - Fizika, No 2, 1957 No 3718

Author : Pinsker, Z.G., Kaverin, S.V.

Inst : -

Title : Mechanism of Phase Transitions and Diffusionless Transformations in the Nitriding of Iron.

Orig Pub : Tr. In-ta kristallogr. AN SSSR, 1956, vyp. 12, 3-17

Abstract : Description of a mechanism of the process of nitriding of thin films of iron, coated on crystals of rock salt, with subsequent separation from the crystals. The nitriding processes were investigated with transmitted beams by electron photography. The following phases were obtained: α -solid solution, practically identical with α -iron; γ' -phase with cubic face-centered lattice; ϵ phase, which comprises hexanitrides. The orienting influence of the substrate (rock salt) on the settling of the film of iron and on the phases that are formed during nitriding,

C Card 1/2

*Dorkey State Univ.
Inst. Crystallography AS USSR*

Kaverin, S.V.

AUTHOR: Pinsker, Z.G. and Kaverin, S.V.

70-3-11/20

TITLE: Electron diffraction study of nitrides and carbides of some transition elements. (Elektronograficheskoye issledovaniye nitridov i karbidov perekhodnykh metallov)

PERIODICAL: "Kristallografiya" (Crystallography), 1957, Vol.2, No.3, pp. 386 - 392 (U.S.S.R.)

ABSTRACT: In this paper certain results are described of the investigations of the authors relating to nitriding and gas carburising of films of Fe, Cr, Mo and W and of the structure of these phases. The films were produced by vapourising wires of 0.3 - 0.5 mm dia., heated by an electric current; Cr was vapourised by using an electrolytic chromium-plated Mo wire. Structural data are given relating to the phases: Fe_4N , Fe_2N , Fe_3N , CrN, MoN, Mo_2N , WN, W_2N , Fe_3C , Fe_4C . In studying the nitriding processes, the phenomenon of non-diffusional rearrangement was discovered and investigated for Fe-, Cr- and Mo-nitrides. Results relating to carburisation of films and the structure of carbides have been described in earlier work of the authors. In addition to studying carbides obtained by carburising Fe films, Gudkov, N.V. (10) is studying in the GIFTI Laboratory (Gorki Physico-technical Research Institute)

Card 1/2

70-3-11/20

Electron diffraction study of nitrides and carbides of some transition elements. (Cont.)

the structure of carbide phases separated by electrolysis from appropriate steels; she discovered also a new rhombic carbide phase which is at present being investigated.

There are 10 figures and 12 references, 6 of which are Slavic.

ASSOCIATION: Institute of Crystallography, Ac.Sc. U.S.S.R.
(Institut Kristallografii AN SSSR)

SUBMITTED: March 7, 1957.

AVAILABLE: Library of Congress
Card 2/2

S.
KAVERIN,AV:

"Electron Diffraction Study of the Carbides of Transitional Metals"
a report presented at Symposium of the International Union Conference of Crystal-
lography Leningrad 21-27 May 1959

SO: B 3..35,471 28 July 1959

L 21725-66 EWT(m)/EWP(t) IJP(c) JD

ACC NR: AP6008065

SOURCE CODE: UR/0032/66/032/002/0195/0196

AUTHOR: Kaverin, S. V.; Znysheva, L. N.; Zotova, T. M.

ORG: Gorky Physicotechnical Research Institute (Gor'kovskiy issledovatel'skiy fizi-ko-tekhnicheskiy institut)

TITLE: Preparation of carbon replicas from cross sections of germanium film

SOURCE: Zavodskaya laboratoriya, v. 32, no. 2, 1966, 195-196

TOPIC TAGS: germanium, electron microscopy, carbon

ABSTRACT: A method is proposed for producing replicas for electron microscopic analysis from cross sections of germanium films deposited on glass and on single crystals of germanium and silicon. The germanium film is deposited by vaporization in vacuum. The glass substrate is broken together with the germanium film and a 100-200 angstrom layer of aluminum is deposited on the fractured section by vaporization in a vacuum followed by a carbon film. The carbon film covers the fracture and its adjacent layer of aluminum. The specimen is etched in aqua regia to free the carbon replica. The film is then carefully washed in water before mounting on the microscope stage. Photomicrographs are shown of cross sections of germanium films on various substrates. Orig. art. has: 4 figures.

SUB CODE: 20/

SUBM DATE: 00/

ORIG REF: 001/

OTH REF: 000

UDC: 537.533.35

Cord 1/1 *dda*

KAVERIN, V.

Author's work. Nauka i zhizn' 29 no.2:93-95 F '62.
(MIRA 15:3)

(Authorship)

GRIGOR'YEV, I.V.; KAVERIN, V.V.

Treating edema in young pigs. Veterinaria II no. 11967.
66 N '64.

(MIRA 1964)

1. Glavnyy veterinarnyy vrach Sovkhosa imeni Lenina, Nuzhayskoy
oblasti. (for Grigor'yev). 2. Glavnyy veterinarnyy vrach Sovkhosa
"Duisenskiy", Morlovskoy ASSR (for Kaverin).

KAVERIN, Yu., student IV kursa

The object of study should be journalistic photography and not only photographic processes. Sov.foto 23 no.1:25 Ja '63.

(MIRA 16:5)

1. Fakul'tet zhurnalistiki Moskovskogo gosudarstvennogo universiteta.
(Photography, Journalistic--Study and teaching)

L 10748-67 EWT(1) GW

ACC NR: AP6020389

(N)

SOURCE CODE: UR/0317/65/000/012/0017/0019

17

AUTHOR: Kavorzin, Yu. (Commander)

ORG: None

TITLE: Underwater communications

SOURCE: Tekhnika i vooruzheniye, no. 12, 1965, 17-19

TOPIC TAGS: underwater communication, sonic communication, submarine communication

ABSTRACT: A general review of underwater communication systems is presented by using information and data published in foreign sources. The general inadequacy of radio transmission for underwater communications is outlined and the advantages of sonic communications for submarine operations are expounded. A schematic diagram shows a general arrangement of an underwater sound station. The propagation of sound in the sea water and the dependence of the sound velocity upon temperature, pressure and salinity is discussed. The variation of the velocity of sound with water depths in Pacific Ocean (near California), Atlantic Ocean and near Bahama Islands is graphically illustrated. The effect of temperature on the direction of sound and the fading of the sound with increasing distances are also reviewed. The linear relationship between decibels /km and sound frequencies is shown in a graph. The effect of refraction on the propagation distances is examined and the formation of underwater channels for transmission of sound over great

Card 1/2

L 10748-67

ACC NR: AP6020389

APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721210016-1

distances is explained. It is mentioned that the channel axis is located at 1000 to 1200 m in the Atlantic Ocean, at 500 to 700 m in the Pacific Ocean and almost at the water surface in arctic areas. The transmission and recording of the blasts caused by bomb explosions at the distances of 4000 to 5700 km and the use of artificial "acoustic bombs" are discussed. The possibilities of using lasers for submarines is briefly mentioned as well as the application of super-long wavelengths for communications between submarines and spacecraft. Orig. art. has: 4 figures.

SUB CODE: 15, 17 / SUB DATE: None

Card

2/2 ^{typ}

PEREVOSHCHIKOVA, K.A.; GOLUBOVICH, L.M.; Primala uchastiye: KAVERINA, A.F.

Concentration of labeled amino acids in vitro and inclusion
into cell proteins of tumors, normal tissues and regenerating
rat livers. Vop. med. khim: 8 no.5:532-537 S-0'62 (MIRA 17:4)

1. Gosudarstvennyy onkologicheskiy institut imeni P.A.Gertsena,
Moskva.

NOVITSKAYA, G.V.; KAVERINA, A.V.; VERESHCHAGIN, A.G.

Quantitative determination of linolenic acid by the Lovelock
ionization detector. Dokl. AN SSSR 159 no.3:672-675 1964
(MIRA 18:1)

1. Institut fiziologii rasteniy imeni K.A. Timiryazeva AN
SSSR. Predstavleno akademikom A.L. Kursanovym.

NOVITSKAYA, G.V.; KAVERINA, A.V.; VERESHCHAGIN, A.G.

Effect of weather conditions on the fatty acid composition of
linseed oil in successive generations. Dokl. AN SSSR 160 no.1:
230-231 Ja '65. (MIRA 18:2)

1. Institut fiziologii rasteniy im. K.A. Timiryazeva AN SSSR.
Submitted May 16, 1964.

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210016-1

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210016-1"

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210016-1

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210016-1"

Subject: [unclear]

ENCL: 00

[unclear]

Card 1/1

NOVITSKAYA, G.V.; KAVERINA, A.V.; VERESHCHAGIN, A.G.

Triglyceride composition of linseed oil. Biokhimiia 30
no.6:1260-1268 N-D '65. (MIRA 19:1)

1. Institut fiziologii rasteniy imeni K.A.Timiryazeva AN SSSR,
Moskva. Submitted April 9, 1965.

KAVERINA, I. V.

Doc Med Sci - (diss) "Effect of pharmacological substances on coronary blood circulation." Moscow, 1961. 23 pp; (First Lenin-grad Medical Inst imeni Academician I. P. Pavlov); number of copies not given; price not given; list of author's works on pp 22-23 (15 entries); (KL, 5-61 sup, 199)

ZAKUSOV, V.V.; KAVERINA, I.V.

Some aspects of the problem of the pharmacology of coronary circulation. Uch.sap.Inst.farm.i.khimiater. AMN SSSR no.2:7-26 '60.

(MIRA 15:10)

1. Laboratoriya chastnoy farmakologii.
(CORONARY VESSELS)

KAVERINA, N.I.; SEMENIDO, Ye.G.

Method of assessing the depolymerization stability of high polymers
soluble in mineral oil. Zav.lab.21 no.10:1213-1214 '55.(MLBA 9:1)

1.Institut goryuche-smazochnykh materialov.
(Propene)

KAVERINA, N.I.

USSR/Chemical Technology - Chemical Products and Their Application. Treatment of Natural Gases and Petroleum. Motor Fuels. Lubricants, I-13

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62624

Author: Semenido, Ye. G., Ivanov, I. A., Kaverina, N. I.

Institution: None

Title: Fractional Composition of Motor Oils

Original

Periodical: Neft. kh-vo, 1955, ³³No 1, 71-76

Abstract: Determined were the optimal fractional composition of oils, for carburetor and diesel automobile engines and aircraft carburetor engines, that ensure a practically complete absence of evaporation of the oil during operation. Oil that distills over up to 340° in an amount not exceeding 5% underwent no change during operation of GAZ-51, and the boiling range of subsequent fractions had no effect on evaporation of the oil in the engine. For V-2 and YaAZ-204 diesels can be used oils containing lower boiling fractions, namely not more

Card 1/2

USSR/Chemical Technology - Chemical Products and Their Application. Treatment of Natural Gases and Petroleum. Motor Fuels. Lubricants, I-13
APPROVED FOR RELEASE: 06/13/2000 CIA-RDP86-00513R000721210016-1"

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 62624

Abstract: than 5% of the oil should distill over at 320°. If the oils contain large amounts of fractions distilling over below 320° they evaporate slowly during operation of the engine under normal temperature conditions, and relatively rapidly during operation at more elevated temperature, after which a stable fractional composition of the oil is attained. Extent of wear of the engine has no effect upon its requirements as to the fractional composition of the oil. Optimal temperature of distilling over of the 5% first fraction of aviation oil is 350°.

Card 2/2

KAVERINA, N.I.

"APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210016-1

APPROVED FOR RELEASE: 06/13/2000

CIA-RDP86-00513R000721210016-1"

A. K. B. L. I. N. G.

Composition and Properties of the High Molecular (Cont.) 647 *
Weight Fraction of Petroleum; Collection of papers, Moscow, Izd-vo AN SSSR, 1958, 370pp.
powder, the MS-20 shows the following group composition (percent by weight): ~~naphthene-paraffin hydrocarbons 70.3; naphthene-aromatic hydrocarbons 27.1; propane soluble tars 0.7; and tarry substances not soluble in propane 1.9.~~ There are 20 tables and 2 English references.

Kaverina, N.I., Losikov, B.V., Fedyantseva, A.A. Adsorption Method for Determining the Fractional Composition of High-Polymeric Lubricating Oil Additives

109

The authors show that chromatographic adsorption can be used as a method for separating polyisobutylene and vinypol, with active carbon or silica gel as adsorbent. The method can be of considerable interest in estimating the quality of high-polymer viscous additives in oils. It can also be used in obtaining polymer fractions with equal molecular weights. There are 5 tables, 1 figure, and 3 references of which 2 are German and 1 English.

~~1958~~ 9/82 * 2nd Collection of papers publ. by AU Conf. Jan 56, Moscow.

AUTHORS: Fuks, G. I., Kaverina, N. I. SOV/20-121-2-35/53

TITLE: The Influence of the Cation Radius Upon the Properties of the Boundary Layers of Electrolyte Solutions in Clearances Between Plane Surfaces of Quartz (Vliyaniye radiusa kationov na svoystva granichnykh sloyev rastvorov elektrolitov v ploskikh zazorakh mezhdu poverkhnostyami kvartsa)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 2, pp. 322 - 325 (USSR)

ABSTRACT: A very weak solution of the chlorine salt of alkali metals or earth alkali metals is brought between two plane parallel specular quartz disks; the disks are pressed together (load unto 8 kg/cm² during 3 - 9 hours). The boundary layer which is equal to half of the width of the clearance between the disks is measured, furthermore the thickness of the remaining layer is measured which is equal to half of the solution layer which cannot be pressed out of the free space between the plates; then the ratio of the viscosities η_0/η and the resistance of the residual layer to compression

Card 1/3

SOV/20-121-2-35/53

The Influence of the Cation Radius Upon the Properties of the Boundary
Layers of Electrolyte Solutions in Clearances Between Plane Surfaces of Quartz

$$\bar{E} \frac{\sigma_p' - \sigma_p''}{\sigma_p'} = \frac{h_{\min}^i (\sigma_p'' - \sigma_p')}{h_{\min}^i - h_{\min}^{ii}}$$

is determined; h_{\min}^i and h_{\min}^{ii} denote the thickness of the boundary layer at specific loads σ_p' and σ_p'' . Then the dimensionless coefficient Ψ of the boundary thickening is determined to be specified by $\Psi = (t_{\text{pull}} \cdot \sigma_{\text{pull}}) / \eta$, where t_{pull} is the time during which a tensile stress is applied and σ_{pull} is the tensile stress. (The thickness of the investigated boundary layer did not exceed $0,35\mu$). Numerous results of such investigations and of the relations between the various factors are given. The influence of the temperature on the magnitude of Ψ shows that Ψ partly increases exponentially with the temperature. Investigations of the dependence of the thickness of the boundary layer of 0,01n- electrolyte solutions showed that h_{\min}^i is the highest when monovalent cations are used.

Card 2/3

SOV/20-121-2-35/53

. The Influence of the Cation Radius Upon the Properties of the Boundary
Layers of Electrolyte Solutions in Clearances Between Plane Surfaces of Quartz

(LiCl - $0,26\mu$, maximum value); BaCl₂ has the lowest value of h_{\min} . Also \bar{E} reaches higher values for monovalent cations than for bivalent ones, but here LiCl has the lowest value of \bar{E} and RbCl the highest one (concentration: 10 mg-equ/l at 20°C). There are 4 figures, 2 tables, and 11 references, 10 of which are Soviet.

PRESENTED: March 7, 1958, by P. A. Rebinder, Member, Academy of Sciences, USSR

SUBMITTED: February 28, 1958

Card 3/3

LOSIKOV, Boris Vital'yevich, prof., doktor tekhn.nauk; PUCHKOV, Nikolay Gavrilovich, kand.tekhn.nauk; ENGLIN, Boris Abramovich, kand.tekhn.nauk; FUKS, G.I., kand.khim.nauk; KAVERINA, N.I., kand.tekhn.nauk; L'VOVA, L.A., vedushchiy red.; FEDOTOVA, I.G., tekhn.red.

[Principles of the use of petroleum products] Osnovy primeneniia nefteproduktov. Izd.2., dop. i perer. Moskva, Gos.nauchno-tekhn. izd-vo neft. i gorno-toplivnoi lit-ry, 1959. 566 p. (MIRA 12:3)
(Petroleum products)

KAVERINA, N. I.

PHASE I BOOK EXPLOITATION SOV/5955

Vassoyurnaya konferentsiya po treniyu i iznosu v mashinakh. 34, 1958.

gidrodinamicheskaya teoriya smazki. Opory stol'zheniya. Smazka i smazochnyy material (Hydrodynamic Theory of Lubrication, Slip Bearings, and Lubrication Materials) Moscow, Izdat. AN SSSR, 422 p. Errata slip inserted. 3,800 copies printed. (Series: Iiz. Trudy, v. 3)

Sponsoring Agency: Akademiya nauk SSSR, Institut mashinovedeniya. Res. Eds. for the Section "Hydrodynamic Theory of Lubrication and Slip Bearings": Ye. N. Pechkov, Professor, Doctor of Technical Sciences, and A. K. G. Vinogradov, Professor, Doctor of Technical Sciences; Res. Ed. V. Vinogradov, Professor, Doctor of Lubricant Materials; Ed. of Publishing House: M. Ya. Alebanov; Chem. Ed.: G. N. Ous'kova.

PURPOSE: This collection of articles is intended for practicing engineers and research scientists.

COVERAGE: This collection, published by the Institut mashinovedeniya AN SSSR (Institute of Science of Machines Academy of Science, USSR) contains papers presented at the 11th (Moscow) and 12th (Leningrad) All-Union Conferences on Friction and Wear in Machines which was held April 9-15, 1958. (Series: Iiz. Trudy, v. 3)

Hydrodynamic Theory (cont.) 507/5955

Juliyev, A. M. Results of the Work of the IzMIL, NP (Azerbaijan Scientific Research Institute of the Petroleum Industry) in the Field of Synthesis, Investigation, and Application of Additives to Lubricating Oils 366

Pechkov, M. G., M. S. Kozova, and V. D. Retnikov. Change in the Chemical Composition and in the Operating Properties of Oils During Use in an Engine 373

Kasaryn, K. S., and M. Kh. Sil's. Mechanism of the Corrosive Activity of Oils and the Protective Action of Additives 381

Puka, G. I., M. Ya. Gultsova, P. Ya. Kirpichov, A. S. Nizhnyy, and I. L. S. On the Applicability of Synthetic Esters as Lubricant Materials 386

Puka, G. I., and N. I. Kaverina. Lubricating Capacity and Properties of the Boundary Layers of Oils (Physical Significance and Characteristics of the Lubricating Capacity of Oils) 397

Klison, E. I., and P. F. Zarudniy. Mechanical Destruction of Solutions of Polymers in a Flow (Published in 1959 under the title: "Mechanical Destruction of Solutions of Polyisobutylene in Mineral Oils" ("Zhurnal i tekhnologiya topliv i masel", No. 2, 1959) 408

Faylov, V. P. Elastic-Endurance Properties of Lubricant Materials (Izv. AN SSSR, OTN, "Mekhanika i mashinostroyeniye", No. 2, 1959) 408

Ziranova, Ye. M., and S. G. Arabyan. Development of an Accelerated-Engine Method for Testing Oils for Diesel Tractors ("Traktory i sel'khozmasliny", No. 9, 1958) 408

89959

15.6600

2209, 1583

S/065/61/000/002/005/008
E194/E284

AUTHORS: Kaverina, N. I. and Sharapov, V. I.

TITLE: Alteration in the Viscosity of Thickened Oils as a
Consequence of Thermal Degradation of the Polymer

PERIODICAL: Khimiya i tekhnologiya topliv i masel, 1961, No. 2,
pp. 52-57

TEXT: The stability of lubricants thickened with polymers depends mainly on the thermal and mechanical stability of the polymer. Thermal and mechanical degradation of the polymer reduces the molecular weight of polymer in the oil so reducing the viscosity of the blended oil. Experimental results are quoted to demonstrate the reduction in viscosity of oils thickened with various amounts of polyisobutylene П-20 (P-20) of molecular weight 20 000 and П-30 (P-30) of molecular weight 30 000. It is found that the viscosity increment resulting from addition of polymer increases with the polymer concentration and accordingly a given amount of polymer degradation will cause different viscosity changes in solutions with different concentrations of polymer. If curves of polymer degradation are compared with curves of oil

Card 1/4

89959

S/065/61/000/002/005/008
E194/E284

Alteration in the Viscosity of Thickened Oils as a Consequence of Thermal Degradation of the Polymer

thickening by the same polymers it is possible to assess the apparent change in polymer concentration expressed as a percentage, which is equivalent to the reduction in viscosity observed in given time intervals, this change is denoted $\Delta c\%$. Tests made with turbine oil thickened with additives P-20 and P-30 in amounts of 5, 10, and 15% show that after heating to 200°C for 20 hours there is negligible change in Δc , whereas after 50 hours there are appreciable differences in the absolute value of Δc , the values for 5, 10 and 15% solutions of polymer being approximately in the ratio 1:2:3 for both types of polyisobutylene. Thus the amount of polymer that is degraded in a given time interval at this temperature is practically proportional to the concentration of it in the oil. A similar result was found in tests on the degradation of vinylpol of molecular weight 9 000. It should be noted that at high concentrations of additive a small change in concentration corresponds to a large change in viscosity. It is found that Δc is practically a linear function of time so that degradation occurs

Card 2/4

89959
S/065/61/000/002/005/008
E194/E284

Alteration in the Viscosity of Thickened Oils as a Consequence of Thermal Degradation of the Polymer

at constant rate depending only on the total concentration of polymer. The same effect is confirmed by curves of change of viscosity during the process of degradation. After twelve hours at 200°C the value of Δc for vinypol is 4.4 whilst for solutions of polyisobutylene of higher molecular weight and the same concentration this amount of degradation is observed only after 60-70 hours for additive P-30 and 100 hours for P-20. With vinypol as with polyisobutylene Δc is a linear function of time. The results show that vinypol is appreciably less stable than the polyisobutylene. As it is of interest to assess the influence of temperature on the stability of polyisobutylene and vinypol over the working temperature range tests were made at temperatures between 20 and 250°C. With polyisobutylene the first signs of degradation are observed at 100°C and thereafter degradation accelerates with increasing temperature. If curves are plotted of the fall in concentration Δc which is equivalent to the viscosity change observed in 12 hours at various temperatures it is found

Card 3/4

89959

S/065/61/000/002/005/008
E194/E284

Alteration in the Viscosity of Thickened Oils as a Consequence of Thermal Degradation of the Polymer

that the temperature coefficient of degradation i.e. the rate of degradation on changing the temperature by 1° increases somewhat with increase in the molecular weight of polymer and with increase of temperature. However, the change in the absolute value of the temperature coefficient of degradation that results from these factors remains small within the range of temperature and molecular weight considered. Tests made with vinypol show that the degradation is about three times greater than that of polyisobutylene under the conditions tested. The selection of molecular weight of polymer for use in blending oils is often of importance and the thermal stability of the oil should be considered in such blends. Tests were made on a number of oils of equal viscosity produced by thickening turbine oil with various amounts of polymers of different molecular weights. Heating tests show that the higher the molecular weight of the polymer the greater the observed drop in viscosity and accordingly from the standpoint of stability of viscosity polymers of lower molecular weight are advantageous. There are 7 figures, 5 tables and 3 Soviet references.

Card 4/4

NAVY/NAVA, N.Y.

U.S.S.R.

Effect of the central nervous system of intravenously injected procaine on the reflexes of the eye muscles, reflexes by direct stimulation of the eye muscles, and reflexes by direct stimulation of the eye muscles.

49

method of the central nervous system of intravenously injected procaine on the reflexes of the eye muscles, reflexes by direct stimulation of the eye muscles, and reflexes by direct stimulation of the eye muscles.

of contractions of the eye muscles. The reflexes of the eye muscles were also investigated. The reflexes of the eye muscles were investigated by direct stimulation of the anterior rectus muscle and by direct stimulation of the eye muscles.

in some instances the contraction of the anterior rectus muscle disappeared first, followed by that of the eye muscles.

related to the effect of I on the afferent fibers or the peripheral nerve trunk, thus, it appears that I acts either on the central or on the motor part of the reflex arc. Injection of 5.5 mg/kg. of I caused a barely observed depression of the reflex contractions of the anterior tibial muscle, but slightly enhanced the amplitude of the knee reflex. This is not related to the direct effect of I on the elements of the knee reflex arc, but rather it is an expression of the acute depression of the motor part of the reflex arc. The depression of the motor part of the reflex arc is common to both, yet I in doses of 1 mg/kg. completely depressed only the cross reflex, affecting the knee reflex only slightly. It would seem, therefore, that the motor neurons could not account for the basic action of the action of I. A method is proposed for the study of the action of I which causes depression of reflex contractions of the anterior tibial muscle.

P. S. Levine

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AND IS BEING RELEASED TO THE PUBLIC

K. H. V. S. I. N. A. D. V. V.
EXCERPTA MEDICA Sec.2 Vol.10/4 Physiology, etc. Apr57

1921. KAVERINA N. V. and MILOVIDOVA E. S. Inst. of Pharmacol. and Chemotherapy, Acad. of Med. Scis, Moscow. *Effect of Rauwolfia serpentina alkaloids on the vegetative reflexes (Russian text) FARMACOL. I TOKSIKOL. 1956, 19/3 (36-42)

Experiments were carried out on cats under urethan anaesthesia and on decerebrate animals, to determine the effects of R. serpentina alkaloids on reflexes originating from mechano- and chemo-receptors in various receptor fields, and also from the central segments of the vagus and the tibial nerve. The preparation used was made by the Institute of Pharmacology and Chemotherapy from the roots of the plant and represented a 1% solution of all the alkaloids. The results showed that the alkaloids depress the blood pressure and respiratory reflexes, originating from the mechanoreceptors of the different receptor fields (carotid sinus, large intestine, and urinary bladder), from the chemoreceptors of the pericardium and also from the central segments of the vagus and the tibial nerve. The least resistant to the action of Rauwolfia alkaloids were the reflexes from the mechanoreceptors of the carotid sinus and from the central segment of the vagus. As the control experiments demonstrated, the depression of vegetative reflexes by Rauwolfia does not depend upon blocking of the efferent paths. In experiments upon the decerebrate animals, the effect of the alkaloids on interoceptive reflexes proved to be much weaker than in anaesthetized animals. These facts show that the depression of the interoceptive reflexes by Rauwolfia alkaloids is conditioned in the main by their influence on the central systems regulating the blood circulation, which are situated above the level of the medulla oblongata. Such an assumption would be in accordance with the data from the literature (Bein, 1953; Plummer and others, 1954; Schneider, 1955, and others). The investigations suggest that a quite significant part in the mechanism of the hypotensive action of the R. serpentina alkaloids is due to depression of the interoceptive reflexes. Kaverina - Moscow

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ZAKUSOV, V.V., professor; KAVRINA, N.V.

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(MLRA 10:1)

1. Iz Instituta farmakologii i khimioterapii Akademii meditsinskikh nauk SSSR. 2. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for Zakusov)

(HEART, blood supply
eff. of vasomotor drugs on coronary vessels)
(VASOMOTOR DRUGS, eff.
on coronary vessels)